J. Jurek, il. 3



April 6, 1979

APR 11 1979

DISTRICT 3 WATER QUALITY DIV.

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TO:

Galen Kilmer, Water Qualtiy Division

FROM:

Jillann Koebbe, Office of Toxic Materials Control

SUBJECT:

T.R.W. Incorporated/Portland Works: Treatment Chemicals

This is in response to Jim Turek's request of March 5, 1979, for discharge information on the products being used by TRW Incorporated. These products are produced by Witco Chemical Company, Chicago, Illinois. This was in reference to an NPDES permit application submitted by T.R.W.

We have reviewed information supplied to us by Witco Chemical on the products specified.

- A. Macco Extrudoil 51-DE
- B. Macco 478-MPA
- C. Macco 230-JL-3
  - D. Macco PF-101
    - E. Macco Hydrocat No. 1
    - Macco additive 261

Witco has requested that the formulations of their products be kept confidential. Therefore, we will not discuss specific constituents but only refer to them in general terms.

Products (A), (B) and (C) are aliphatic hydrocarbons and chlorinated water soluble oils. Many of their constituents are petroleum based. Polynuculear aromatics (PNA's), found in petroleum and coal based products, are presently of concern, due to their possible carcinogenic potential. They also can cause organoleptic problems and are toxic to terrestrial and aquatic life. Considering these problems, it is essential that these products be disposed of properly.

Witco recommends that products (A), (B) and (C) be disposed of in the following manner:

Acid split the oil-water emulsions. A licensed waste hauler should remove the oil portion. The remaining water solution should be neutralized (neutral pH) and disposed of thru an effluent system.

G. Kilmer April 6, 1979 Page 2 Product (D) contains alkaline salts. The constituents are moderately toxic to terrestrial and aquatic life. Witco recommends disposal of product (D) by a licensed waste hauler, if local sewer systems will not permit solvents and nitrogen salts. This product may react with acids. Product (E) is a mixture of non-ionic and ionic surfactants. (E) contains a material that is on the 1978 Critical Materials Register. This constituent has been found to be mutagenic by inhalation. It is moderately toxic to terrestrial and aquatic life and produced liver damage in laboratory animals in chronic feeding sutdies. Witco recommends that this product be hauled off site and disposed of by a licensed waste hauler. Product (F) is described by Witco to be dischargeable in concentrations typically used. The product should not be discharged without dilution. One constituent is irritating in its gasous form, with an OSHA stardard of TWA: 0.1 ppm. These products are machine coolants and drawing oils. Systems were developed, according to Witco, to maintain the life of these products indefinitely. This was done so that they would not "eventually enter the environment and cause harm". If there is to be discharge and disposal of these products, we recommend that Witco's specified procedures for each product be followed. If you have any questions concerning these products, please contact this office as soon as possible. Under the guidelines of confidentiality established by the Environmental Services Division, we must return the confidential constituent information when the evaluation is complete. cc: Jim Turek, District 3 WQD Files